

AMENDMENTS TO THE CLAIMS

Listing of claims:

1. (Currently Amended) An analog-electronic tripping device for an electrical power breaker responding to a short circuit, comprising:

a current transformer, in the form of a power-supplying current transformer, adapted to detect a current flowing in a circuit monitored by the power breaker;

a tripping magnet, adapted to release switching contacts of the power breaker;

a measuring and control circuit, adapted to activate the tripping magnet when the detected current exceeds a limit value;

a rectifier circuit, connected downstream of the current transformer, adapted to convert the detected current into a direct current, wherein the current transformer and the rectifier circuit form a power supply circuit; and

a controllable power semiconductor, connected in parallel with the tripping magnet and connected in parallel with the current supply formed by the rectifier circuit, adapted to be controlled by the measuring and control circuit, wherein the controllable power semiconductor is turned fully on when the limit value is undershot and is turned fully off when the limit value is exceeded.

2. (Previously Presented) The tripping device as claimed in claim 1, wherein the power semiconductor is connected to a feedback branch for maintaining the fully on state.

3. (Previously Presented) The tripping device as claimed in claim 1, further comprising:

a capacitor, chargeable by turning the power semiconductor off for a short period of time, for providing a control current required for maintaining an on state of the power semiconductor.

4. (Previously Presented) The tripping device as claimed in claim 1, wherein the tripping magnet is a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

5. (Previously Presented) The tripping device as claimed in claim 2, further comprising:

a capacitor, chargeable by turning the power semiconductor off for a short period of time, for providing a control current required for maintaining an on state of the power semiconductor.

6. (Previously Presented) The tripping device as claimed in claim 2, wherein the tripping magnet is a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

7. (Previously Presented) The tripping device as claimed in claim 3, wherein the tripping magnet is a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

8. (Previously Presented) The tripping device as claimed in claim 5, wherein the tripping magnet is a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

9. (Currently Amended) An analog-electronic tripping device for an electrical power breaker responding to a short circuit, comprising:

first means, including a power-supplying current transformer, for detecting a current flowing in a circuit monitored by the power breaker;

second means for releasing switching contacts of the power breaker;

third means for activating the second means when the detected current exceeds a limit value;

fourth means, connected downstream of the first means, for converting the detected current into a direct current, wherein the first and fourth means form a power supply circuit; and

fifth means, connected in parallel with the second means, connected in parallel with the current supply formed by the fourth means, and controllable by the third means, for turning on fully when the limit value is undershot and for turning off fully when the limit value is exceeded.

10. (Previously Presented) The tripping device as claimed in claim 9, wherein the fifth means is connected to a feedback branch for maintaining the fully on state.

11. (Previously Presented) The tripping device as claimed in claim 9, further comprising:

sixth means, chargeable by turning the fifth means off for a short period of time, for providing a control current required for maintaining an on state of the fifth means.

12. (Previously Presented) The tripping device as claimed in claim 9, wherein the second means includes a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

13. (Previously Presented) The tripping device as claimed in claim 10, further comprising:

sixth means, chargeable by turning the fifth means off for a short period of time, for providing a control current required for maintaining an on state of the fifth means.

14. (Previously Presented) The tripping device as claimed in claim 10, wherein the second means includes a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

15. (Previously Presented) The tripping device as claimed in claim 11, wherein the second means includes a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

16. (Previously Presented) The tripping device as claimed in claim 13, wherein the second means includes a separate tripping magnet which is only connected to the tripping device responding to a short circuit.

17. (Currently Amended) A method for an electrical power breaker responding to a short circuit, comprising:

detecting a current flowing in a circuit monitored by the power breaker;

activating a tripping magnet, releasing to release switching contacts of the power breaker, when the detected current exceeds a limit value;

converting the detected current into a direct current using a ~~measuring and control~~rectifier circuit; and

controlling a controllable power semiconductor using the measuring and control circuit, wherein the controllable power semiconductor is turned fully on when the limit value is undershot and is turned fully off when the limit value is exceeded, and

wherein the controllable power semiconductor is connected in parallel with the tripping magnet and connected in parallel with the current supply formed by the rectifier circuit.